Date: Thu, 17 Mar 94 11:07:01 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V94 #301
To: Info-Hams

Info-Hams Digest Thu, 17 Mar 94 Volume 94 : Issue 301

Today's Topics:

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Mon, 14 Mar 1994 13:27:47 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!europa.eng.gtefsd.com!
darwin.sura.net!perot.mtsu.edu!raider!theporch!jackatak!root@network.ucsd.edu
Subject: 1x1 Callsigns?
To: info-hams@ucsd.edu

jholly@cup.hp.com (Jim Hollenback) writes:
> Bob Levine (levine@mc.com) wrote:
> : Has anyone seen anything in print about whether the vanity
> : callsign program (someday) might allow 1x1 calls?
> : (for info, a 1x1 is like K1X)
> No, but I've heard ther is a 2X1 ... JY1
But, Jim. That's a 2x0! ;^) *AND* there's TWO of them:

JY1 and his spouse JY2
But then, he makes the rules, so his call can be anything he wants as
long as it conforms to the basic ITU allocations...

Thanks for the chuckle.
73
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

+--*--+
Jack GF Hill	Voice: (615) 459-2636 - Ham Call: W4PPT
P. O. Box 1685	Modem: (615) 377-5980 - Bicycling and SCUBA Diving
Brentwood, TN 37024	Fax: (615) 459-0038 - Life Member - ARRL
root@jackatak.raider.net -   "Plus ca change, plus c'est la meme chose"
+--*--+

Date: Mon, 14 Mar 1994 13:42:43 GMT
From: ihnp4.ucsd.edu!swrinde!emory!news-feed-2.peachnet.edu!news-
feed-1.peachnet.edu!darwin.sura.net!perot.mtsu.edu!raider!theporch!jackatak!
root@network.ucsd.edu
Subject: 1x1 Callsigns?
To: info-hams@ucsd.edu

rwilkins@ccnet.com (Bob Wilkins n6fri) writes:
> Jeffrey D. Angus (jangus@skyld.grendel.com) wrote:
> :   Based on how some people view me, I'm gonna sign up for A6H.
> :   It's look good on the car too.
>
> Someone else we know might like ah6fu
[....snip.....]

Ah, hate to get technical here, it is just r.r.a.misc, but we do NOT
have the entire block of "A" calls... just AAA-ALZ. Hence A6H belongs
to another land...United Arab Emirates, and i DO not see the Sheik
giving that up to a US 6-lander!

A side note: a certain ham was issued KB4FU, and proudly got a
callsign tag for his car. Someone in a supermarket commented to his
wife, and suddenly he realized the potential for abuse of his
callsign, phonetically speaking.

He quacked and fussed, and sent the call back to the FCC (for
repairs?) and demanded a new callsign to replace the "obsene" one
first issued...

Those who believe the FCC and the "Higher Power" have no sense of
humor read on: Presently, there appeared on the gent's doorstep

another envelope from Gettysburg... he tore it open and found....

KB4 _T_ough _S_hit!   ;^)
73
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

+--*--+
Jack GF Hill	Voice: (615) 459-2636 - Ham Call: W4PPT
P. O. Box 1685	Modem: (615) 377-5980 - Bicycling and SCUBA Diving
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root@jackatak.raider.net -   "Plus ca change, plus c'est la meme chose"
+--*--+

Date: 17 Mar 94 16:34:34 GMT
From: news-mail-gateway@ucsd.edu
Subject: Alaska QSO Party
To: info-hams@ucsd.edu

Are there any KL7s reading this that plan to operate the Alaska QSO
Party this weekend? If you plan to operate 80/75, what would be a good
time to listen for you? Last one for my 5BWAS!

73 de Chris KU4A
ku4a@lexvmk.vnet.ibm.com

Date: Thu, 17 Mar 1994 08:52:26 GMT
From: news.Hawaii.Edu!uhunix3.uhcc.Hawaii.Edu!jherman@ames.arpa
Subject: Body Parts by J. Herman
To: info-hams@ucsd.edu

In article <762477092snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D.
Angus) writes:
>
> Funny, you've followed up on almost all of my postings now trying to
> point out some alledged "fascination" with body parts.
>
> Not trying to avert some attention to your own fascination are you?

<yawn>

Take a sedative, my friend. Oh, you forgot to mention where Conway Yee
shot himself.

73,
Jeff NH6IL

Date: Mon, 14 Mar 1994 13:36:48 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!darwin.sura.net!perot.mtsu.edu!raider!theporch!jackatak!root@network.ucsd.edu
Subject: Definition of CW speeds
To: info-hams@ucsd.edu

clh6w@faraday.clas.Virginia.EDU (Carole L. Hamilton) writes:

> You've make quite a leap in going from PARIS to 50 units! What
> asumptions did you make about dash per dot ratio? And how many
> dots per space?

Actually, I'd say *you* are the one who has made the leap (and bound?)... ;^)

For the best and most lucid description of character formation and timing (what you refer to as dash-dot [sic] ratio) I suggest you read the very excellent documentation that comes with SuperMorse... it is truly worth the shareware fee, JUST for the docs and the treatise on timing...
73
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

Jack GF Hill	Voice: (615) 459-2636 - Ham Call: W4PPT
P. O. Box 1685	Modem: (615) 377-5980 - Bicycling and SCUBA Diving
Brentwood, TN 37024	Fax: (615) 459-0038 - Life Member - ARRL
root@jackatak.raider.net - "Plus ca change, plus c'est la meme chose"	

Date: Thu, 17 Mar 1994 09:01:30 GMT
From: ihnp4.ucsd.edu!usc!sdd.hp.com!apollo.hp.com!hpwin052!hpqmoea!dstock@network.ucsd.edu
Subject: Diesel or Taurus fr HF/VHF mobile??
To: info-hams@ucsd.edu

  Chain and gears, oh well, another theory down the pan...

  I've been accused of having enough curiosity to kill a cattery, I'd have had that lump out and running on a bench, then tried it with the injectors out spinning over driven by a 3 hp electric motor, then with the head off, then with the pistons and rods out etc etc until something

finally affected it ?

  Did you try exorcism?

   I don't blame you for unloading it back whence it came, but the whole thing must really niggle.

  Cheers
         David

Date: Thu, 17 Mar 1994 15:35:59 GMT
From: ihnp4.ucsd.edu!usc!yeshua.marcam.com!zip.eecs.umich.edu!
newsxfer.itd.umich.edu!nntp.cs.ubc.ca!suncad!freenet.Victoria.BC.CA!
uf484@network.ucsd.edu
Subject: E-mail gateway translator?
To: info-hams@ucsd.edu

Is there anyone out there who knows if there is an Internet
site which translates e-mail into either mcode or sw, then
sends it to a specific callsign? I'd like to reach my friend
who is an avid ham, but doesn't use e-mail.

Regards,
Daniel Hertz (uf484@freenet.victoria.bc.ca)
--
Uncorked! The Wine Consultants

Date: 17 Mar 94 17:43:58 GMT
From: news-mail-gateway@ucsd.edu
Subject: Grounding and lightning protection--KE4ZV
To: info-hams@ucsd.edu

Gary, you mentioned that a typical lightning strike has an energy
of about 20J. Is this really correct? I did a comparison to the energy
stored in a 50uF capacitor charged to 3kV (E=C*V**2), which is 450J,
and I was surprised that the charged cap stored almost 25 times
the energy of a typical lightning strike (not to say that a 50uF filter
cap in an amplifier is anything to sneeze at!). Have I miscalculated
something?

Mike   N6MZ   mikemr@microsoft.com

Date: 17 Mar 1994 06:18:59 GMT
From: ihnp4.ucsd.edu!agate!darkstar.UCSC.EDU!cats.ucsc.edu!haynes@network.ucsd.edu
Subject: HAM Origin?
To: info-hams@ucsd.edu

In article <CMsJCA.IMx@ucdavis.edu>,
Daniel D. Todd <ez006683@chip.ucdavis.edu> wrote:
>Edward Sorensen (edsorensen@delphi.com) wrote:
>: I have a father-in-law who is a ham Chuck Kramer (KE4BWG) he asked where and
>the Scottish or Irish pronunciation of le'amateur, Or that the opposite
>of a lid in the telegraph service was a ham. (the most likely in my

Quite the contrary. In the 19th century poor telegraph operators were called "hams" or "plugs"; and the trade schools that turned them out were called "ham factories". This is from Edwin Gabler's book "The American Telegrapher - A social History, 1880-1900" and it's evident from the book that Gabler read a lot of the magazines and other literature addressed to telegraph operators of the period. Of course that doesn't prove that "ham radio" derives from "ham operators" of the wire telegraph days, but it's quite plausible since at the time ham radio started there were lots of professional telegraph operators and the radio amateurs were mere hobbyists. Nor does Gabler explain how the poor operators came to be called "hams" or "plugs".

This question ought to be in the FAQ file - it comes up over and over.
--
haynes@cats.ucsc.edu
haynes@cats.bitnet

"Ya can talk all ya wanna, but it's dif'rent than it was!"
"No it aint! But ya gotta know the territory!"
        Meredith Willson: "The Music Man"

Date: 16 Mar 1994 14:59:21 -0500
From: ihnp4.ucsd.edu!swrinde!sgiblab!wetware!spunky.RedBrick.COM!psinntp!
starcomm.overleaf.com!not-for-mail@network.ucsd.edu
Subject: This Week on Spectrum 03/19/94
To: info-hams@ucsd.edu

This week on Spectrum we will talk about receivers. Our guest is a man who knows them from antenna jack to speaker. Larry Van Horn answers technical questions all day long on the Monitoring Times answerline. Larry has the opportunity to test almost everything that comes down the pike and with that unique position he can give a great overview of receivers. Bring your questions to Spectrum this weekend and get them

answered from the expert.

Next week on Spectrum (Saturday March 26'th) Spectrum will feature a look back at radio and telecommunications history through the ears and eyes of Don Kimberlin. Don worked in all aspects of radio and tellecomm from the 1950's through today. He has an interesting perspective on the communications industry and is a living archive of high-tech history. The only way anyone can know and interpret the future is to see it after understanding and learning from the past. Don is a high-tech historian and you will see why on Spectrum.
--
Spectrum airs live Sunday at 0300 UTC (2200 EST Saturday) on:

  WWCR, 5810 KHz, Nashville, TN (World Wide)
  WIFI, 1460 AM, Philadelphia, PA (Philadelphia Area)
  KHNC, 1360 AM, Denver, CO (Denver Area)
  Omega Radio Network, Galaxy III, X17, 5.8 MHz WIDE audio. (Satellite)

Spectrum is rebroadcast:

  Sunday at 1500 EST, on WIFI, 1460 AM, Philadelphia, PA (Philadelphia Area)
  Monday at 0400 UTC (2300 EST Sunday),
         on WWCR, 7435 KHz, Nashville, TN (World Wide)

--
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spectrum@overleaf.com, askspectrum@attmail.com, spectrumshow@genie.geis.com
+1 800-787-SPECTRUM, +1 908-671-4209 (FAX +1 908-671-2495)

Date: 17 Mar 1994 15:51:02 GMT
From: ihnp4.ucsd.edu!usc!math.ohio-state.edu!cyber2.cyberstore.ca!nntp.cs.ubc.ca!
alberta!quartz.ucs.ualberta.ca!tribune.usask.ca!canopus.cc.umanitoba.ca!
umthoma5@network.ucsd.edu
Subject: Who was coordinating the GPS board purchase?
To: info-hams@ucsd.edu

Could the person that offered to coordinate the group purchase of the Motorola GPS boards please e-mail me? I am unable to search back to find your address and there are a few people here that are interested in getting on the want list.

Thanks!

--

Craig Thomasson VE4 CET "If your parents didn't have kids,
umthoma5@cc.umanitoba.ca   chances are, you won't either."
 Model Railroading... Amateur Radio... Computers... Engineering...
 More fun than any human being should be allowed to endure...

Date: Thu, 17 Mar 1994 06:29:11 GMT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!gatech!wa4mei!ke4zv!
gary@network.ucsd.edu
To: info-hams@ucsd.edu

References <1994Mar16.155633.14996@ke4zv.atl.ga.us>,
<brett_miller.15.000E3859@ccm.hf.intel.com>, <1994Mar16.162143.1@clstcs>
Reply-To : gary@ke4zv.atl.ga.us (Gary Coffman)
Subject : Re: Grounding and lightning protection

In article <1994Mar16.162143.1@clstcs> armyrman@vms4.sci.csupomona.edu (Alex
Myrman) writes:
>
>I too have antennas up on the roof and a couple long wire (dipoles) hanging
>around off the house.
>What should be done when lightning comes? I understand clearly that they
>should NOT be in the radio but where should the lead-in's go?

Do commercial broadcast stations disconnect their antennas when a
thunderstorm approaches? No. Do their antennas get struck by lightning?
Yes, again and again and again. Do their transmitters sustain damage?
Do their transmitter buildings burn down? Are their operators killed?
No. No. And no. Why? Proper installation. (Truth be told, all of the
above *have* happened at commercial broadcast stations, but in every
case the cause can be traced to, you guessed it, improper installation.)

Proper installation isn't cheap or easy. Make the slightest mistake,
cut the smallest corner, and you open yourself to catastrophic damage.
So what's a ham with limited funds and knowledge to do? Many hams
just disconnect their coaxes and drop them behind the radio. Some who
are a bit more savvy stick the end of the cable in an old mayonaise
jar. Neither trick is satisfactory. If your antenna is struck, there's
going to be around a *million* volts on that cable, that much voltage
can jump 100 inches in air, and it *will* if it has to in order to
reach ground potential.

The only proper way to deal with lightning is to give it a controlled
way to go to ground. It's going to go to ground one way or another,
your only hope is to direct it in a way that's safe for you, your
equipment, and your home.

>I have a heavy ground run to the radio room for grounding the equipment.
>Should the antennas be connected to this, grounding the center conductor
>and sheild? Should they be grounded and a real lightning rod be installed?
>Or just disconnected from the radio's?

Well just disconnecting from the radio isn't good enough. You've got
to give that lightning a *low impedance* way to reach ground. And that
low impedance path has got to be able to successfully handle 4,000 amperes
of *RF* current. That's what lightning is, nature's own spark transmitter.

Ideally you'll have a ground window installed at your station. (I know
you folks are probably tired of seeing me preach about this, but it is
the best protection you can have.) That ground window will have *every*
wire that enters or leaves your station passing through it via proper
lightning suppressors, including power, telephone, coax, *everything*.
Note, arrange the cabling so that no downlead parallels an interior
station cable run. Otherwise surges will be inductively coupled from
the outside cable to the inside cable bypassing the ground window.

The ground window will be connected *directly* to your ground field
by a straight low inductance conductor. In no case shall the conductor
be less than number 8 solid copper wire, but should really be a wide
copper strap, 5 inch copper flashing is good. (The reason wide copper
strap is preferred is that it's inductive only at its edges, and because
skin effect limits current penetration to only a few thousandths of
an inch so you want as much surface area as possible.) Ideally there
will be no bends in the ground run, but in no case shall there be
any *sharp* bends. That adds inductance.

Note that in *addition* to the ground window, every antenna or support
whose construction will allow it should have a separate ground conductor
run to the station ground field. This will relieve the downleads, and
suppressors, of part of the current load they'll have to carry during
a strike.

A single 8 foot ground rod is *not* an effective ground field. Ideally
we'd copper plate the Earth to form an effective ground field, but that's
impractical. So we make do with driven ground rods. In average soil, a
single 8 foot ground rod will have a resistance to Earth of about 230 ohms.
That will place a connection to that rod at 920 kV during a 4000 ampere
strike. Not good. As currents start to flow into the ground, the soil
becomes temporarily *saturated* with charge. This limits the amount of
current that can be quickly dumped into any individual Earth connection.
So we need a bunch of Earth connections. How many is a bunch? Well good
practice says that the total resistance to Earth should be less than
25 ohms, so that means at least 10 rods are required. How far apart
should the rods be to avoid overlapping saturation zones? The rule of
thumb is that ground rods should be no closer together than the *sum*

of their lengths. That means that any two rods in the ground field need to be at least 16 feet apart.

The rods should be laid out in a star pattern with the rods connected to each other by no less than 1.5 inch bare copper strap buried not less than 18 inches below grade level. Note that these straps can be considered horizontal ground rods themselves and can reduce the number of driven rods needed in the system by about a third. So assume 7 rods, one central and six radial at a 16 foot separation. Make all connections to the central rod. That's your *single point ground*. Tie power company, phone company, and CATV grounds to this point as well as attaching your station ground and separate antenna grounds to this point. Never never never daisy chain grounds. All grounds must be tied to this single point, and only to this single point. (Note, if you have a tower, it can serve as the central rod. With its base planted in concrete, it forms a Ufer ground superior to a single driven rod. Note too that if you have metallic underground plumbing, that should also be tied to your single point ground by a strap connection.)

One more caveat. If your soil is dry sandy soil, or very rocky, you'll need more rods than for the typical case above. It's OK to extend your star out beyond the first ground rod, and in this case *only* it's OK to daisy chain along a radial from one rod to another, but more than two rods along a single radial reach a point of diminishing returns. The buried radials themselves, however, make a dandy groundplane for a vertical antenna and can extend out as far as you like.

I've left out many details in the above system, such as how to deal with bonding dissimilar metals, always making a *mechanical* connection as well as an electrical connection (solder *will* melt during a strike), what constitutes a *proper* lightning suppressor, etc. Entire books have been written on proper station installations. You should read at least one, _The National Electrical Code_. And I'd recommend one more, Roger Block's _The Grounds for Lightning and EMP Protection_.

Ok, that's the *proper* way to protect your station. Now what's the cheap ham way? Install an *outdoor* bulkhead panel near ground level and bring all your antenna coaxes through it with bulkhead feedthru connectors. Drive a rod into the ground at least 100 inches from the house and bolt a bar to it that has female coax chassis fittings attached, both shell and center connected to the bar. When a storm approaches, unscrew all cables from the bulkhead and screw them to the ground bar. This will keep dangerous currents and voltages *outside* your house. But that bar is going to reach 900 kV during a strike. Make sure there's nothing conductive nearby. Obviously *don't* ground the house bulkhead panel to this rod.

(Note that this cheap approach has several faults. First you've got

to be home to connect the coaxes to the ground bar. Second there is
such a thing as clear sky lightning. Not all strikes occur during
a well defined storm. Third, any cable that passes parallel to the
grounded coaxes is going to have a large surge inductively coupled
into it. And fourth not all lightning is going to come into your
house via your antennas. It can also come in on the power wiring,
the phone wiring, or the CATV wiring. So this method should be
considered a minimum *expedient* only. It does beat a mayonaise
jar.)

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

Date: Wed, 16 Mar 1994 07:21:48 -0600
From: ihnp4.ucsd.edu!usc!math.ohio-state.edu!news.acns.nwu.edu!ftpbox!mothost!
lmpsbbs!NewsWatcher!user@network.ucsd.edu
To: info-hams@ucsd.edu

References <763354761snx@skyld.grendel.com>, <2lpa6o$gkd@ccnet.ccnet.com>,
<CMquD6.GJy@news.Hawaii.Edu>
Subject : Re: 2x0 callsigns? (was: 1x1 Callsigns?)

In article <CMquD6.GJy@news.Hawaii.Edu>, jherman@uhunix3.uhcc.Hawaii.Edu
(Jeffrey Herman) wrote:

> In article <2lpa6o$gkd@ccnet.ccnet.com> rwilkins@ccnet.com (Bob Wilkins n6fri)
writes:
*** (LOTS OF LINES ELIMMINATED HERE FOR BREVITY) ***
> >
> >Someone else we know might like ah6fu I don't think he can get enough
> >spark from a tv set to justify a 1x1 call. The call is available as the
> >last fellow could not handle it ;)
>
> Hey, who ya talkin' about, Bob? AH6FU is a Hawaii call, and there's only
> one Hawaii ham who posts on here.... (oh my God - is he referring to me?)
>
> I guess Hawaii hams will be vying for 2x0 callsigns since we have to
> have the mandatory `H6' in the prefix. Not much of a choice:
> AH6, KH6, NH6, WH6. Phooey. [Hey, now there's a neat call: PH0OEY.]
>
> Jeff NH6 IL

Jeff, we thought you were going for AL 0 HA. After all, it's a vanity call
so the normal prefix limitations (AH=Hawaii, AK=Alaska) should no longer
apply!

--
Karl Beckman, P.E.   < STUPIDITY is an elemental force for which >
Motorola Comm - Fixed Data   < no earthquake is a match. -- Karl Kraus >

The statements and opinions expressed here are not those of Motorola Inc.
Motorola paid a marketing firm a huge sum of money to get their opinions;
they have made it clear that they do not wish to share those of employees.

Amateur radio WA8NVW @ K8MR.NEOH.USA.NA   NavyMARS VBH @ NOGBN.NOASI

Date: Wed, 16 Mar 1994 08:52:10 +0000
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!pipex!demon!skewsby.demon.co.uk!
sjh@network.ucsd.edu
To: info-hams@ucsd.edu

References <2lnm9t$643@jericho.mc.com>, <2lo1ii$g94@oak.oakland.edu>,
<1994Mar11.133322.1912@mwk.com>o.uk
Subject : Re: 1x1 Callsigns?

In article <1994Mar11.133322.1912@mwk.com> gleason@mwk.com writes:
> In article <2lo1ii$g94@oak.oakland.edu>, prvalko@vela.acs.oakland.edu (prvalko)
writes:
> > calls. If I remember correctly, In the US, the call must BEGIN with "A,
> > K, N, or W" then have a SINGLE DIGIT NUMBER and followed by at LEAST one
>
>
>   W, A, N, and K...guess that makes us hams here in the states a
> bunch of WANKers...I suspect the Brits had a hand in assigning us
> these letters...
>
> Lee K. Gleason N5ZMR
> Control-G Consultants
> gleason@mwk.com

If Only !

++
+ Simon J Hopkins   sjh@skewsby.demon.co.uk +
+ Consulting Partner Limited   g8pxb@ampr.org   +
++

End of Info-Hams Digest V94 #301
****
****